

**Institute Undergraduate Curriculum Committee
Appeals and Academic Matters (Full Committee)
Tuesday, January 18, 2011**

Present: Riley (ECE), Pikowsky (REG), Montoya (BIOL), Seitzman (AE), Loss (MATH), Ferri (ME), Paredis (ME), Walker (PSYCH), Senf (LCC), Castro (BC/COA), Agrawal (ChBE), Isbell (CoC), Hollengreen (ARCH), Stein (Dean of Students), Castro-Lacouture (ARCH), Ludovice (ChBE)

Visitors: Laros (REG), Howson (REG), Paraska (VPFAD), Shook (ML), McKnight (ML), Li (ML), Ippolito (ML), Dunn (Admissions), Budd (ID), White (CoC), Hartley (EAS)

Note: All action items in these minutes require approval by the Academic Senate. In some instances, items may require further approval by the Board of Regents or the University System of Georgia. If the Regents' approval is required, the change is not official until notification is received from the Board to that effect. Academic units should take no action on these items until USG and/or BOR approval is secured. In addition, units should take no action on any of the items below until these minutes have been approved by the Academic Senate or the Executive Board.

Academic Matters

1. A presentation was made by Professor Jim Budd, Chair of School of Industrial Design (CoA) on the upcoming proposed curriculum changes to the Bachelor of Science in Industrial Design degree. The timeline presented shows a plan to commence formal approval process for these degree modifications during Spring 2011 and a goal of full implementation of the new curriculum, if approved, for Fall 2012.
2. A motion was made to approve a request from the School of Earth and Atmospheric Sciences for a degree modification. The motion was seconded and approved.

DEGREE MODIFICATION: Bachelor of Science in Earth and Atmospheric Sciences

The only modification requested is changing the chemistry requirement from CHEM 1310 and 1311/12 to CHEM 1211K and 1212K. This change is due to recent changes that chemistry made to the courses that were being offered. This modification does not change the hours for the degree in any way since the former and the new CHEM sequence is both 8 semester hours.

3. The School of Chemical and Biomolecular Engineering requested review of prerequisite changes for the CHBE classes. No objections or concerns were recorded.

Prerequisite changes (informational item):

These prerequisites incorporate the changes made recently to the CHEM course offerings as well as courses that have been required at the School level for several years.

Course Name	Prerequisite	Concurrency	Grade
CHBE 2100	CHEM 1211k or 1310		D
	MATH 1502 or		C
	15x2 and 1522		C
CHBE 2110	CHBE 2100	Yes	C
	BIOL 1510		D
CHBE 2120	CHBE 2100		C
	CS 1371		D
CHBE 3110	CHBE 2110		C
	CHBE 2120		C
	MATH 2401 or 24x1		C
	MATH 2403 or 24x3		C
CHBE 3200	CHBE 2110		C
	CHBE 2120		C
	MATH 2401 or 24x1		C
	MATH 2403 or 24x3		C
	PHYS 2211		D
CHBE 3210	CHBE 3110		C
	CHBE 3200		C
CHBE 4300	CHBE 3110		C
	CHBE 3200		C
	CHBE 3210	YES	C
CHBE 3225	CHBE 3210	YES	C
	CHBE 3110		C
	CHBE 3200		C
CHBE 4400	CHBE 3210		C
	CHBE 3225	YES	C
	CHBE 4300	YES	C
CHBE 4515	CHBE 3210		C
	CHBE 3225		C
	CHBE 4300		C
CHBE 4200	CHBE 3210		C
	CHBE 3225	YES	C
	CHBE 4300	YES	C

CHBE 4505	CHBE 3210		C
	CHBE 3225		C
	CHBE 4300		C
	CHBE 4515	YES	C

Courses required for the BSBCHBE–Biotechnology Option

CHBE 4210	CHBE 3210		C
	CHBE 3225	YES	C
	CHBE 4300	YES	C
CHBE 4310	CHEM 3511 or 4511		D
	CHBE 3210		C
	CHBE 3225		C
	CHBE 4300		C
CHBE 4525	CHBE 3210		C
	CHBE 3225		C
	CHBE 4300		C
	CHBE 4515	YES	C

4. A motion was made to approve a request from the College of Computing for a new course, deactivation of a course, and to review 84 prerequisite changes. The motion was seconded and approved and no objections or concerns were recorded for the prerequisite changes.

DEACTIVATE COURSE: CS 4612

To be deactivated immediately since course has not been taught in several years.

NEW COURSE:

CS 2316: Data Manipulation for Science and Industry (3-0-3)

Note: The new course proposal form listed 1.5 hours of lab/recitation. The Registrar noted that fractions were not allowed and suggested that item #11 on the form be reviewed to determine the components of the expected mode of presentation. There was discussion of the 10% of demonstration and the committee noted that this typically indicates what the instructor is demonstrating to a class. This is not what was intended by the proposers of the course. After further review, it was determined that the best way to group the activities is 65% lecture and 35% discussion.

Prerequisite changes (informational item):

COURSE	CURRENT PRE-REQ	REQUESTED CHANGE
CS 3451	(CS 2110 or CS 2261) and MATH 2605	(MATH 2605 or 2401 or 24X1 or 2411) and a "C" or higher in (CS 2110 or CS 2261)
CS 4245	(Math 2605 or 2401 or 2411) and (CS 1332 or 1372)	(MATH 2605 or 2401 or 2411 or 24X1) and a "C" or higher in (CS 1332 or 1372)
CS 4260	CS 2200 and (MATH 3215 or MATH 3225)	(MATH 3215 or MATH 3225 or MATH/ISYE/CE 3770 or ISYE 2028) and a "C" or higher in CS 2200

CS	4335	(MATH 3215 or MATH/ISYE/CEE 3770) and (CS 1332 or 1372)	(MATH 3215 or MATH/ISYE/CE 3770 or ISYE 2028) and a "C" or higher in (CS 1332 or CS 1372)
CS	4495	MATH 2605 and (CS 2110 or CS 2261)	(MATH 2605 or 2401 or 24X1 or 2411) and a "C" or higher in (CS 2110 or CS 2261)
CS	4660	CS 2340	None
CS	1331	CS 1301 or CS 1315 or CS 1321 or CS 1371	"C" or higher in (CS 1301 or CS 1315 or CS 1321 or CS 1371)
CS	1332	CS 1331 or CS 1322	"C" or higher in (CS 1331 or CS 1322)
CS	1372	CS 1171 or 1371 or CS 1301	CS 1171 or "C" or higher in (CS 1371 or CS 1301)
CS	2110	CS 1331	"C" or higher in CS 1331
CS	2200	CS 2110	"C" or higher in CS 2110
CS	2261	CS 1331	"C" or higher in CS 1331
CS	2335	CS 1332	"C" or higher in CS 1332
CS	2340	CS 1331 or 1372 or 1316	"C" or higher in (CS 1331 or CS 1372 or CS 1316)
CS	2600	CS 1301 or CS 1315 or CS 1371	"C" or higher in (CS 1301 or CS 1315 or CS 1371)
CS	3101	CS 1301 or 1315 or 1371	"C" or higher in (CS 1301 or CS 1315 or CS 1371)
CS	3210	CS 2200	"C" or higher in CS 2200
CS	3220	CS 2200	"C" or higher in CS 2200
CS	3240	CS 2340	"C" or higher in CS 2340
CS	3251	CS 2200	"C" or higher in CS 2200
CS	3300	CS 2340	"C" or higher in CS 2340
CS	3510	CS 1050 and CS 1331 and MATH 3012	MATH 3012 and a "C" or higher in (CS 1050 and CS 1331)
CS	3511	CS 1050 and CS 1331 and MATH 3012	MATH 3012 and a "C" or higher in (CS 1050 and CS 1331)
CS	3600	CS 1332	"C" or higher in CS 1332
CS	3630	CS 1332	"C" or higher in CS 1332
CS	3651	ECE 2031	"C" or higher in ECE 2031
CS	4140	CS 2110 or 1372 or 1332	"C" or higher in (CS 2110 or CS 1372 or CS 1332)
CS	4210	CS 2200	"C" or higher in CS 2200
CS	4220	CS 2200	"C" or higher in CS 2200
CS	4225	CS 2110 or 1372 or 1332	"C" or higher in (CS 2110 or CS 1372 or CS 1332)
CS	4230	CS 2200	"C" or higher in CS 2200
CS	4233	CS 3210	"C" or higher in CS 3210
CS	4235	CS 1301 or CS 1371 or CS 1315	"C" or higher in (CS 1301 or CS 1371 or CS 1315)
CS	4237	CS 3251	"C" or higher in CS 3251
CS	4240	CS 3240	"C" or higher in CS 3240
CS	4251	CS 3251	"C" or higher in CS 3251
CS	4255	CS 3251	"C" or higher in CS 3251
CS	4261	CS 2200	"C" or higher in CS 2200
CS	4270	CS 3251	"C" or higher in CS 3251
CS	4290	CS 2200	"C" or higher in CS 2200
CS	4320	CS 3300	"C" or higher in CS 3300
CS	4330	CS 3300	"C" or higher in CS 3300
CS	4342	CS 3300	"C" or higher in CS 3300
CS	4343	CS 1332 or 1372	"C" or higher in (CS 1332 or CS 1372)
CS	4365	CS 3210 or CS 4400	"C" or higher in (CS 3210 or CS 4400)
CS	4392	CS 3240	"C" or higher in CS 3240
CS	4420	CS 4400	"C" or higher in CS 4400
CS	4432	CS 3300 and CS 4400	"C" or higher in (CS 3300 or CS 4400)

CS	4440	CS 4400	"C" or higher in CS 4400
CS	4455	CS 3451	"C" or higher in CS 3451
CS	4460	CS 1331	"C" or higher in CS 1331
CS	4464	CS 1331	"C" or higher in CS 1331
CS	4470	CS 2340 and (CS 3750 or PSYC 3750)	"C" or higher in (CS 2340 and CS/PSYC 3750)
CS	4475	CS 1301 or CS 1315 or CS 1371	"C" or higher in (CS 1301 or CS 1371 or CS 1315)
CS	4480	CS 3451	"C" or higher in CS 3451
CS	4496	CS 3451	"C" or higher in CS 3451
CS	4510	CS 1050 and CS 1331 and MATH 3012	MATH 3012 and a "C" or higher in (CS 1050 and CS 1331)
CS	4520	CS 4540	"C" or higher in CS 4540
CS	4530	CS 4540	"C" or higher in CS 4540
CS	4540	CS 3510 or 3511	"C" or higher in (CS 3510 or CS 3511)
CS	4550	CS 3451	"C" or higher in CS 3451
CS	4560	CS 1050 and CS 3510	"C" or higher in (CS 1050 and CS 3510)
CS	4605	CS 2110 or CS 2261	"C" or higher in (CS 2110 or CS 2261)
CS	4611	CS 3600	"C" or higher in CS 3600
CS	4612	CS 3600	"C" or higher in CS 3600
CS	4613	CS 3600	"C" or higher in CS 3600
CS	4615	CS 3600	"C" or higher in CS 3600
CS	4616	CS 1331	"C" or higher in CS 1331
CS	4622	CS 3600	"C" or higher in CS 3600
CS	4625	CS 1331	"C" or higher in CS 1331
CS	4632	CS 3630	"C" or higher in CS 3630
CS	4635	CS 3600	"C" or higher in CS 3600
CS	4641	CS 1331	"C" or higher in CS 1331
CS	4642	MATH 2403 or 24X3 or 2602 or 2413	"C" or higher in (MATH 2403 or 24X3 or 2602 or 2413)
CS	4643	CS 4642 or MATH 4640	"C" or higher in (CS 4642 or MATH 4640)
CS	4650	CS 1331	"C" or higher in CS 1331
CS	4665	CS 4660	"C" or higher in CS 4660
CS	4670	CS 4660	"C" or higher in CS 4660
CS	4675	CS 2200	"C" or higher in CS 2200
CS	4685	CS 2200	"C" or higher in CS 2200
CS	4690	CS 3750 or PSYC 3750	"C" or higher in CS/PSYC 3750
CS	4770	CS 2340 and LCC 2700	LCC 2700 and a "C" or higher in CS 2340

5. A motion was made to approve a request from the School of Modern Language for a degree modification, new courses, and course deactivations. The motion was seconded and approved.

DEGREE MODIFICATION:

Bachelor of Science in Applied Languages and Intercultural Studies
Chinese, French, and German Tracks

The degree program was originally approved by the BOR on May 12, 2010 with Japanese and Spanish tracks, with plans for Chinese, French and German to be added in the future. The timing for adding the latter three languages was approved to be at the discretion of the Provost's Office. Information for all five tracks or concentrations was provided in the original proposal, with details for Chinese, French and German tracks listed in the appendices, and to

some extent in the main body of the proposal as well. The intent was to request approval for the *B.S. in Applied Languages and Intercultural Studies*, a degree which could then have new concentrations/tracks added as appropriate in the future by Georgia Tech.

NEW COURSES:

CHIN 4021: Advanced Language, Popular Music and Culture	3-0-3
CHIN 4031: Chinese-Language Cinema: Technological, Cultural, and Urban Transformation in China	3-0-3
CHIN 4500: Advanced Intercultural Seminar (letter grade only)	3-0-3
FREN 3000: Survey of French Literature	3-0-3
FREN 3015: Social Identities in Contemporary France	3-0-3
FREN 3017: Paris: Modernity Today	3-0-3
FREN 3040: Reading and Translation	3-0-3
FREN 3551: French for Professions I	3-0-3
FREN 3552: French for Professions II	3-0-3
FREN 3555: French for Engineers I	3-0-3
FREN 3556: French for Engineers II	3-0-3
FREN 3110: Comics and Graphic Arts	3-0-3
FREN 3500: Field Work Abroad (Letter grade only and variable hour course/repeatable) 1 to 3--0--1 to 3	
FREN 4011: Modern French Art	3-0-3
FREN 4013: French Literature and Visual Arts	3-0-3
FREN 4103: Francophone Africa Today	3-0-3
FREN 4105: Francophone Cinema	3-0-3
FREN 4107: African Diaspora	3-0-3
FREN 4200: French Philosophy	3-0-3
FREN 4300: France and Globalization	3-0-3
GRMN 3030: Crossing Borders in Literature and Culture	3-0-3
GRMN 3055: Fairy Tales: From the Grimm Brothers to Disney	3-0-3
GRMN 3110: Television and Electronic Culture	3-0-3
GRMN 4120: Literary Representations of German History	3-0-3
GRMN 4126: Advanced Stylistics: Grammar and Discourse	3-0-3

All of the above new language courses were approved as Humanities.

Registrar's Office will work with Modern Language to review all of the items listed on the NCPs to make sure the course titles, transcript titles, and other details on the form are clear, correct, and as descriptive as possible, including attributes, prerequisites, etc.

DEACTIVATE COURSES:

- GRMN 3035
- GRMN 3036
- GRMN 3072
- GRMN 4062

6. A motion was made to approve a request from the School of Materials Science and Engineering a degree modification and new courses. The motion was seconded and approved.

DEGREE MODIFICATION:

Bachelor of Science in Materials Science and Engineering

The following modifications to the existing B.S. MSE curriculum are being requested:

Increase in the number of semester hours required for graduation from 128 to 132;

The requested course changes to the B.S. MSE degree requirements are:

Eliminate:CHEM 1310 (4 hrs.); CHEM 1311 (3 hrs.); CHEM 2311 (3 hrs.); MSE 1001 (1 hr.); MSE 2020 (4 hrs.); MSE 3000 (4 hrs.); MSE 3003 (4 hrs.); MSE 3012 (3 hrs.); MSE 4002 (3 hrs.); MSE 4006 (3 hrs.); MSE 4010 (3 hrs.); MSE 4777 (3 hrs.); MSE 4020 (1 hr.); MSE 4021 (2 hrs.); 6 hours of Technical Electives; 3 hours of MSE Elective. **(46 hours total)**

Add: CHEM 1211K (4 hrs.); CHEM 1212K (4 hrs.); CHEM 1315 (3 hrs.); COE 3001 (3 hrs.); MSE 1111* (1 hr.); MSE 2021** (4 hrs.); MSE 3001*** (3 hrs.); MSE 3005[†] (3 hrs.); MSE 3210^{††} (3 hrs.); MSE 4410^{††} (3 hrs.); MSE 4420^{††} (3 hrs.); MSE 4775 (3 hrs.); 15 hours of concentration specific courses (16 for Biomaterials Concentration); 2 hours of Free Elective (1 hour for Biomaterials Concentration) **(50 hours total)**

* New course, replaces MSE 1001

** New course, replaces MSE 2020

*** Currently active (not offered for several years) replaces MSE 3000

[†] Currently active (not offered for several years) replaces MSE 3003

^{††} Currently offered as PTFE 3210, 4110 and 4210, respectively.

Require: An ethics related Social Science Elective

Create the following three 15 credit hour Concentrations, one of which each MSE undergraduate will follow: Polymer & Fiber Materials; Structural & Functional Materials; Biomaterials. The Concentration specific courses are as follows:

Polymer & Fiber Materials Concentration

Required Courses:

ME 3340 Fluid Mechanics

MSE 3225 Rheology (new course)

MSE 4140 Polymer Physics (Previously PTFE 4140)

MSE 3230 Polymer & Fiber Processing (Previously PTFE 3230)

Optional Courses: (students choose one of the following 3 hour courses)

MSE 4761 Industrial Controls & Manufacturing (Previously PTFE 4761)

MSE 4025 Fiber Product Manufacturing (New course, amalgam of several previous PTFE courses: 3200, 3720 and 4100)

MSE 3220 Operations & Management Methods (Previously PTFE 3220)

Structural & Functional Materials Concentration

Required Courses

MSE 4002 Ceramic Materials
MSE 4006 Processing & Applications of Engineering Alloys
MSE 4010 Environmental Degradation

Optional Courses (students choose two of the following 3 hour courses)

MSE 3012 Thermal & Transport Properties of Materials
MSE 3220 Operations & Management Methods
MSE 3225 Rheology
MSE 3230 Polymer & Fiber Processing (Previously PTFE 3230)
MSE 4025 Fiber Product Manufacturing
MSE 4140 Polymer Physics (Previously PTFE 4140)
MSE 4330 Nanomaterials & Structures
MSE 4335B Soft Nano-Bio Materials
MSE 4751 Introduction to Biomaterials
MSE 4754 Electronics Packaging Assembly, Reliability, Thermal Management & Test
MSE 4755 Electronic Packaging Substrate Fabrication
MSE 4761 Industrial Controls and Manufacturing (Previously PTFE 4761)
MSE 4791 Mechanical Behavior of Composites
MSE 4793 Composite Materials & Processing

Biomaterials Concentration

Required Courses

MSE 4002 Ceramic Materials
MSE 4006 Processing & Applications of Engineering Alloys
MSE 4751 Introduction to Biomaterials
BIOL 1510 Biological Principles (4 hrs.)

Optional Courses (students choose one of the following 3 hour courses)

MSE 3012 Thermal & Transport Properties of Materials
MSE 3220 Operations & Management Methods (Previously PTFE 3220)
MSE 3225 Rheology
MSE 3230 Polymer & Fiber Processing (Previously PTFE 3230)
MSE 4010 Environmental Degradation
MSE 4025 Fiber Product Manufacturing
MSE 4140 Polymer Physics (Previously PTFE 4140)
MSE 4330 Nanomaterials & Structures
MSE 4335 Soft Nano-Bio Materials
MSE 4754 Electronics Packaging Assembly, Reliability, Thermal Management & Test
MSE 4755 Electronic Packaging Substrate Fabrication
MSE 4761 Industrial Controls and Manufacturing
MSE 4791 Mechanical Behavior of Composites

MSE 4793 Composite Materials & Processing

The MSE faculty has voted to 1) eliminate the “D Rule” that currently pertains to the Grade Requirements for the B.S. MSE degree, and 2) require courses listed in the curriculum by name and number and concentration specific courses to be taken on a letter grade basis.

To affect this change, the text in the online Georgia Tech Catalog should be modified by replacing all text with the following:

“In order to encourage students to explore subjects of personal or professional interest without jeopardizing their GPA, the Institute has a limited pass/fail option. The policy of the School of Materials Science and Engineering regarding the use of pass/fail hours for credit is as follows: no course specifically required by name and number by the Materials Science and Engineering curriculum nor any course used to satisfy a Concentration Specific requirement may be taken on a pass/fail basis and used toward graduation, unless the course is offered only on that basis.”

The curriculum is being revised to incorporate the B.S. Polymer and Fiber Engineering Curriculum into the B.S. Materials Science and Engineering Curriculum.

The basis of why a curriculum modification is being requested is as follows. The School of Polymer, Fiber and Textile Engineering merged with the School of Materials Science and Engineering effective July 1, 2010. The School’s faculty voted to accept no new students into the B.S. PFE program after the 2010-11 academic year and to terminate the program after the final B.S. PFE student graduates or otherwise leaves the program. ABET accreditation will not be sought again for the PFE program.

The key differences between the current program and the proposed revision are:
Total hours required increases from 128 to 132, including the two hour Wellness requirement.

Three 15 hour Concentrations are created: Polymer & Fiber Materials; Structural & Functional Materials; Biomaterials. Free elective hours increase from 3 to 5.
MSE and Technical Electives are replaced by required courses and/or lists of course options for each Concentration.

NEW COURSES:

MSE 1111: Introduction to Materials Science (Previously PTFE 3210)	0-3-1
MSE 2021: Materials Characterization	3-3-4
MSE 3210: Transport Phenomena	3-0-3
MSE 3220: Operations and Management Methods (Previously PTFE 3220, Title Change)	3-0-3
MSE 3225: Rheology	3-0-3
MSE 3230: Polymer and Fiber Processing (Previously PTFE 3230)	3-0-3

MSE 3720: Introduction to Polymer/Fiber Enterprise (Previously PTFE 3720, Title Change)
3-0-3

MSE 4025: Fiber Product Manufacturing	3-0-3
MSE 4100: Chemical Applications to Fiber Materials (Previously PTFE 4100, Title Change)	2-0-2
MSE 4122: Fiber Chemistry Laboratory (Previously PTFE 4122, Title Change)	0-3-1
MSE 4140: Polymer Physics (Previously PTFE 4140, Title Change)	3-0-3
MSE 4330: Fundamentals of Nanomaterials and Nanostructures	3-0-3
MSE 4335: Soft Nano/Bio Materials	3-0-3
MSE 4410: Capstone Engineering Design I (Previously PTFE 4110)	2-3-3
MSE 4420: Capstone Engineering Design II (Previously PTFE 4210)	1-6-3
MSE 4761: Industrial Controls and Manufacturing (Previously PTFE 4761)	2-3-3
MSE 4026: Testing and Evaluation of Polymer and Fiber	2-3-3

Petitions

1. Student Petitions Considered and Voted-Upon by the Committee

All were approved except as noted:

- 2-three hour overload for Spring 2011
- 1-retroactive change in readmission contract GPA-**DENIED**
- 4-term withdrawal from Fall 2010-**1 DENIED**
- 2-waiver of the 36-hour rule-**1 DENIED**
- 2-one hour overload for Spring 2011
- 1-two hour overload for Spring 2011

2. Petitions Handled by Administrative Decision

The following petitions met the guidelines for “Administrative Action,” and were decided by the Registrar under the authority granted to her by the Committee. All were approved except as noted:

- 6-return Spring 2011 after withdrawing Fall 2010
- 1-use CHEM transfer credit to meet degree requirements

Adjourned,

Reta Pikowsky
Registrar